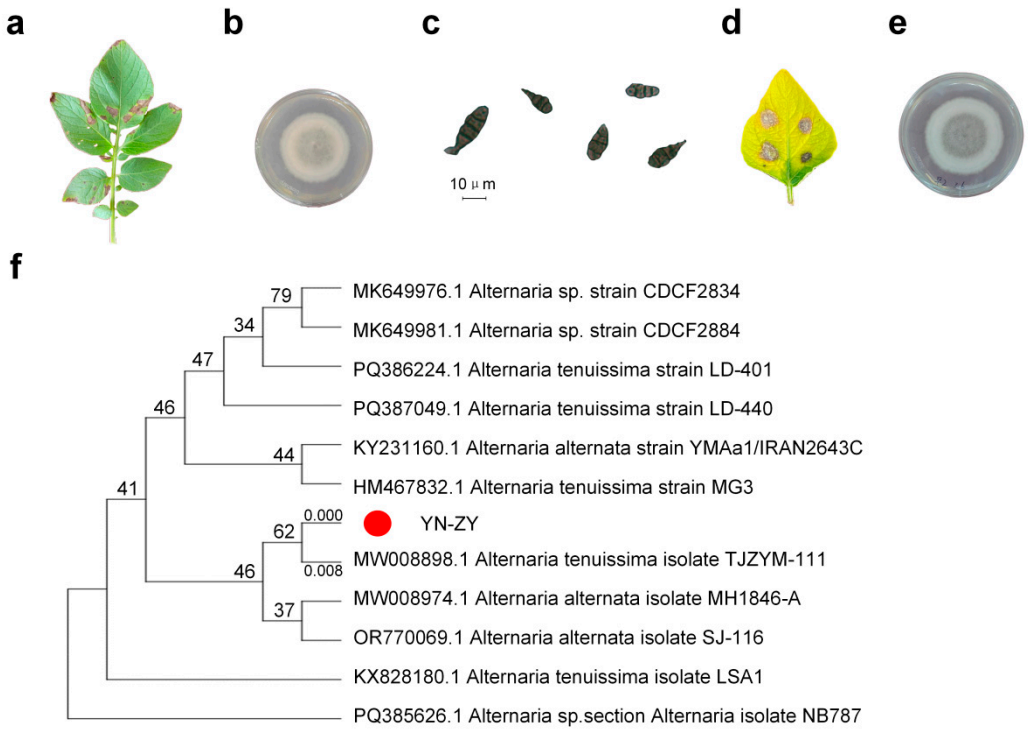


Figure S1. Isolation, pathogenicity assessment, and phylogenetic identification of the causal agent of potato early blight.

(a) Potato leaf sample displaying typical early blight symptoms (necrotic lesions with concentric rings). (b) Morphological characteristics of the fungal isolate obtained from the diseased sample. (c) Conidia of the pathogen observed under a light microscope. Scale bar = 10 μm. (d) The pathogenicity test fulfilled Koch's postulates, as the inoculated plants developed symptoms identical to those observed in the field. (e) Colony morphology of the fungus re-isolated from the inoculated leaf, which is identical to the original isolate. (f) Phylogenetic tree constructed using MEGA11 software. The isolate obtained in this study (highlighted with a red circle) clusters closely with the reference strain Alternaria tenuissima.